THE GENESEE FARMER.

Vol. V. ROCHESTER, OCTOBER 10, 1835. No. 41.

Published by Luther Tucker.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

THE GENESEE FARMER.

SATURDAY, OCT. 10, 1835.

Importation of Cattle.

MR. TUCKER—I have read the communication of *Ulmus* in the Genesee Farmer of Sept. 26, on the subject of improving our stock of cattle. I think well of the project he proposes, and wish to be one of its members if such a company can be formed. W. WHITNEY.

Rochester, Oct. 1, 1853.

Frnit Gardens and Orchards.

As the time is now approaching when those who intend to plant orchards and fruit gardens will have to commence operations, a few remarks on planning them and selecting proper varieties, may be acceptable.

The first object to be attained is the *selection of the ground.* It is true, a choice is often beyond our control; but where the nature of things admits of it, it is desirable to know what soil is best. This must vary with the kind of fruit; for most trees, however, a rich light soil is to be preferred; and in every case, a cold, wet, clayey soil should be avoided. Some trees, such as the *apple*, succeed on almost any soil of a tolerable degree of fertility, although it succeeds best on one which is rich and moderately moist. The *pear, cherry, peach* and *nectarine*, should be planted in a deep loose soil, sandy for the cherry and peach, but for the pear this is not necessary. The *apricot* should have a rich black mold; and the *quince*, a soil that is rich and moist. The *plum* flourishes best in a rich sandy loam, neither dry nor very moist. Most soils in the western part of the state are tolerably well adapted for almost every kind of fruit; but where a choice can be made, and especially where the intended ground varies in its nature and quality, it should be an object so to arrange the respective kinds,that each may be furnished, as nearly as may be, with its appropriate soil. But where soil is unfavorable, a most excellent practice, is to dig very large holes, (say eight or ten feet in diameter and two feet deep,) and fill them before the trees are transplanted with that which is best adapted to their growth. And in every case where the soil has any degree of hardness, digging large holes is of the very first consequence, as the roots during several of the first years of the tree's growth, have loose earth in which to extend themselves. On this often depends almost the entire success of the cultivation. If those who are intending to transplant trees, would prepare the ground *now*, —dig the holes, and fill them with the proper materials, some time before they wish to set out the trees, they would have a better opportunity to do the work well, and be less liable to perform it imperfectly from being too much hurried at the time.

The *distance asunder*, at which trees are to be placed must depend partially on circumstances. In a fertile soil for instance, they grow larger than in a sterile one; consequently require greater room. The distance will often also depend on the use which is to be made of the land; where it is intended to cultivate it and raise crops, it may be advantageous to plant at a greater distance than would otherwise be the case. But where the extent of ground is limited, and crops from it are of little consequence, a greater proximity will be required. The distance also will depend in some measure on the variety, some varieties of the same species growing much larger than others. Thus for instance, the early sweet Bough, does not occupy more than one half the surface covered by a tree of the fall pippin; and a tree of the early white nutmeg peach is not one third the size of one of the early York of equal age. Generally, however, this difference in varieties is not great, and need not be taken into account. As a general rule, *apples* should stand from 30 to 40 feet apart—*pears* from 15 to 20 feet—*quinces* not more than 10 feet—*peaches* about 20—*apricots* 15—and *plums* 12 or 15.

As one of the best methods to destroy the *Curculio*, is by swine running among the trees during the early part of the season, one of the first points to be considered in planning a fruit garden, is to place trees of smooth stone fruit, (which are partially liable to the attacks of this insect,) in such a situation that they may be easily separated from the other trees by a light temporary fence, in order that swine may be exclusively confined among them.

An object of the first importance in selecting kinds of trees, is to obtain such as will afford *a constant supply of ripe fruit throughout the year.* Hence some fruits, though not of great excellence in themselves, become eminently valuable in consequence of ripening at a time when no others are to be had. A good selection of varieties of the following kinds of fruit will furnish a succession the year round. 1st. Cherries; these continue through the first half of summer, until apricots and early plums are ripe. 21. Apricots and plums, soon followed by the earliest peaches and pears. 3d. Peaches, and summer and autumnal pears, each of which will afford a succession from the usual time of wheat harvest till late autumnal frosts. 4th. Apples and winter pears, which will continue the supply till the following summer. Although apricots and peaches will almost always be preferred to early apples for table fruit, the latter should by no means be neglected,as peaches and apricots are not unfrequently destroyed by frosts, and besides, variety is always desirable.

A selection of varieties of each kind of fruit, comprising a moderate number of the best in existence, would be of particular advantage to those about to commence their cultivation; but there are very few if any persons competent to such a task. Of apples, for instance, there are an almost endless number of varieties, many of them excellent, a large number of which are not generally known, or cultivated in nurseries. A selection may however be made of a few *among* the best and most commonly known. The following, which are named nearly in the order in which they ripen, (as is the case also with the other lists which follow,) will give a supply throughout the year. Early striped Juneating, Early harvest, Sine qua non, Early sweet bough, Summer pearmain, Tool's Indian rareripe, Strawberry apple, Autumnal swaar, Maiden's blush, Fall pippin, Stroat, Baldwin, Bellflower, Spitzenberg, Swaar, Newtown pippin and Roxbury russet. Perhaps a hundred varieties, equal in quality to some in this list, might be added.

Among the peaches,the following are considered as deserving of cultivation. Early red and early white nutmeg, Early Anne, (or green nutmeg,) Early variety of red rareripe, Grosse mignonne, Early York, Red cheek malacaton, Lemon clingstone, Morris' white freestone, Chancellor, Incomparable, and Heath. The Heath, if removed from the tree before severe frosts, will keep till winter in an excellent state. The varieties named in this list, if in sufficient quantities, will furnish a supply from the usual time of wheat harvest in this district, until winter. As the early nutmeg peaches are small and of diminitive growth, there should be a greater number of trees to compensate for this deficiency.

The apricot, although inferior in quality to the peach, is a most excellent fruit, and is highly deserving of cultivation on account of its early maturity. The following will afford ripe fruit in this district for about one month during the middle of summer. Early masculine, White, Roman, Orange, Peach and Moorpark. The two last exceedingly resemble each other.

Among the best and most common varieties of the plum, are, the Early yellow or White primordian, Orleans, Green gage, Washington, Yellow gage, and Blue imperatrice.

Cherries—Early May, Early Richmond, Amber, May Duke, White Tartarean, Black Tartarean, Transparent guigne.

Some of the best varieties of the pear for summer and autumn fruit, are, Madeleine, Jargonelle, Early Roussellet, Stevens' Genesee, September, Seckel, Virgalieu, Brown Beurre, and Duchesse d'Angouleme; and for winter fruit, Beurre Diel, Easter Beurre, and Passe Colmar.

While the trees of a fruit garden or orchard are small, and during several years of their early growth, it is absolutely necessary that the soil should be kept loose and mellow at the surface about them. This may generally be most easily done by raising yearly crops from the ground, as while they are small they shade it but little, and are very slightly detrimental to such crops. And in subsequent years when the trees become large, the ground should not be suffered to remain long in grass, but should be ploughed every few years. Where ploughing is impracticable, the earth should be spaded about them and the surface kept mellow, and while the trees are young, this should be repeated several times during the year.

We give the following, from a subscriber:

"Will you oblige me by inserting some que

ries relative to the use of saw dust from saw mills as a manure. It occurs to me it might be used to advantage on clay soils. Any information upon the subject you can give, or elicit from your correspondents, will be appreciated by yours, &c."

Importation of Valuable English Stock.

I observe in the last number of the Genesee Farmer a recommendation for the formation of an association to import Short Horn cattle.

I beg to state, that I have myself recently brought from England a number of the best description of cattle, sheep and horses. The cattle are chiefly of the improved Durham Short Horns, among which are four yearling bull calves, several heifers of the same age, and the rest milch cows, many of which are now in calf to my pure bred bull "Rover," sired by Rockingham. My sheep were obtained from the best English breeders, and are of the most improved sort, remarkable both for quality and quantity of wool. The horses comprise two yearling stud colts, from the celebrated racing horse Humphrey Clinker, (out of thorough bred mares which I now have,) one two year old stud colt of the hunting breed by old Catfoss, one three year old stud of the Cleveland Bay, by Strickland's King Alfred, and several mares of various breeds. The whole of the above were selected by myself from the most superior stock of that country. Should any of those gentlemen who are so laudably coming forward to form the association alluded to, for the important purpose of improving the stock of this country, deem it worth their notice to view the above, I shall have great satisfaction in showing the same to them.

I likewise brought over with me some hogs, which I consider of an excellent kind.

THOS WEDDLE.

The old Norton Farm, East Bloomfield, five miles west of Canandaigua, October 7th, 1835.

Meeting of the Horticultural Society.

On Wedesday, Sept. 30, the autumnal meeting of the Horticultural Society for the counties of Ontario and Wayne, took place, according to notice, at Blossom's Hotel, in the village of Canandaigua.

The first proceeding of the Society, in the morning, was the appointment of committees to examine the various articles presented, and award premiums.

The Committees were as follow: *On Fruits*—S. M. Hopkins, F. Granger, and Z. Barton Stout; *On Vegetables*—Wm. H. Adams, —— Balmanno, O. L. Holley; *On Flowers*—Mrs. Williamson, Mrs. Ross, Mrs. M. H. Sibley, Mrs. McConnell, Mrs. Cochran.

The fruits, vegetables and flowers, were arranged for exhibition on tables in the great dining room of the Hotel, the walls and ceiling of which had been dressed and decked in a very tasteful way, by the excellent gardeners in the employ of Messrs. Greig, Duncan and Blossom, with a drapery gathered from forest, orchard and garden, beautifully appropriate, and variegated with the rich dyes of autumn, among which, hung at various intervals, were seen double pears, twin plums, apples in great clusters, and other anomalies of vegetation.

The Committees were engaged in their examinations and in adjudging premiums, from about 12 till a little after one o'clock, and the premiums were announced after dinner.

ON FRUITS.

Apples, 1st prem. (Newtown pippin) to J. Fellows,.....$2 00
2d " (a red Winter apple) to O. Phelps,.....1 00
Pears, 1st " (Seckel) to J. Gallagher,2 00
2d " (a Winter Pear) to M. H. Sibley,.....1 00
Peaches, 1st " (St. George's Cling) E. H. Howard,.....2 00
2d " (several fine kinds) John Greig,.....1 00
Plums, 1st " (Egg-plum) A. Duncan, 2 00
2d " (Blue Gage) E. C. Howard,.....1 00
Quinces, J. D. Bemis,.....1 00
Grapes, (not less than 2 lbs.) 1st prem. (Gray Tokay) Wm. H. Adams,.....2 00
2d prem. (Sweet water) J. Fellows, 1 00
For greatest variety, (36 kinds) Wm. H. Adams,.....2 00
For best specimen native (Isabella) G. Goundry,.....1 00
Melons, (best Watermelon) William H. Adams,.....0 50
(best Muskmelon) A. Duncan, 0 50
(Pomegranate melon) J. Greig, 1 00
Filberts, Bowen Whiting,.....1 00

After this report, Mr. Hopkins gave an exceedingly interesting statement of various experiments, which he had made during the past season, on the management of grape vines, with a special reference to the ascertainment of the *nature* and *cause* of *mildew*. The statement was wholly oral, and it is impossible to give a full and exact report of it here; though the general conclusions which Mr. H. drew from his experiments, was, that the *mildew of grapes* was analagous to the *rust of wheat;* that is, an exudation, or oozing out, of the juice of the young grape through its tender skin, burst, in the very early stages of its growth, by excessive stimulation by *too high manuring*, and then acted on by the *intense heat of our American summer sun*. Mr. H. had examined the grapes in all stages of their progress, with a microscope, and was entirely convinced that he was right, as to the *nature* of mildew, and believed that he had ascertained at least *one* of its *causes*, if not its only one. He exhibited samples of clusters, taken from different parts of his vines, to illustrate his positions and exemplify the effects of his different modes of management. He considers that the treatment, indicated by his experiments, was to avoid high manuring, and to prune little, or none, so as to leave to the clusters the shelter of all the shade the vine can furnish, and even to train the vines on trees for the sake of additional umbrage, as the custom has always been in Italy. On this point Mr. H. referred to the natural habits of the grape, and to the methods of culture pursued in the more sunny regions of southern Europe, and thought that our modes of treatment should be drawn from those climates, as being more like our own, rather than from countries many degrees north of us, as England and Scotland, where the humid, chill, and unsunned atmosphere about the vines, rendered much stimulation and pruning necessary.

Such is a very succint, but, it is believed, correct outline of the views presented by Mr. H. Before the society adjourned a resolution was passed, requesting Mr. H. to furnish a detailed and full statement of his experiments and views on this subject, for the press.

ON VEGETABLES.

Cauliflower,	best 2 plants,	to Alex. Duncan,	$1,00
Broccoli,	do.	" Wm. Blossom,	1,00
Cabbage,	" 1 specimen,	" A. M. Langdon,	50
Potatoes,	" half peck,	" John M'Connell,	1,00
Squash,	" 1 specimen,	" Alex. Duncan,	1,00
Blood-beets,	" six,	" John Greig,	1,00
Celery,	" 4 plants,	" Bowen Whiting,	1,00
Beans,	" 1 quart,	" do.	1,00

The same Committee awarded three discretionary premiums of one dollar each, viz: To Wm. T. Codding, for the best specimen of *Onions;* to Alex. Duncan, for the best *Tomatoes;* and to John Greig, for best *Egg-plant.*

In making these awards, it was observed in behalf of the Committee, that reference was had, not merely to great *growth*, but to excellence of *kind*. In awarding the discretionary premiums, moreover, the Committee considered, not only the excellence of the specimens, but particularly the adaptedness of the vegetables to general cultivation in the open air, without peculiar artificial helps, as well as their wholesomeness and utility, and the need there might be for calling attention to them for the purpose of encouraging and extending their cultivation. These latter considerations, connected with the facts, that the *discretionary* premiums were restricted to *three*, and that the premiums advertised extended only to the foregoing list of vegetables, will explain why no premium was awarded to an admirable sample of *Mushrooms* from Mr. Greig's garden, nor to a very superior specimen of *Turneps* presented by Mr. McConnell.

ON FLOWERS.

For the most beautiful Dahlia, to Mrs. Greig, $1,00
For the most beautiful specimens of flowers, (3 sorts) to Mrs. B. Whiting,.....1,00

The following discretionary premiums were also warded:

For a new annual, the Putonia nigitiflora, (introduced by Mr. Greig's gardener,) to Mrs. Greig,.....1,00
For the most beautiful and extensive variety of flowers, (34 kinds) to Mrs. Duncan,.....1,00
For the next finest variety, to Mrs. Balmanno, ...1,00

The following are the officers for the ensuing year:

JOHN GREIG, President; SAMUEL M. HOPKINS, WM. H. ADAMS, OLIVER PHELPS, WM. S. DE ZENG, ALEXANDER DUNCAN, ABRAHAM L. BEAUMONT, Vice-Presidents; JOSEPH FELLOWS, Treasurer; O. L. HOLLEY, Corresponding Secretary; Z. BARTON STOUT, Recording Secretary.

The Corresponding Secretary was directed to prepare a Circular, on behalf of the Society, and have three hundred copies printed, for distribution in the counties of Ontario and Wayne, in the hope of enlarging the numbers of the Society and extending its usefulness.

The manner of arranging the articles presented for premiums, being brought before the Society for consideration, it was unanimously concluded that, at all future meetings, the specimens offered for premiums should be laid on the tables, *unaccompanied* by any *names*, but simply designated by *numbers*, or *marks* of some kind, minutes of which, in connection with the names of the persons presenting them, should be taken by some one appointed for the occasion, so that the Committees for awarding premiums should have no knowledge of the names of competitors, till after judgment is passed; and that the examination for the purpose of assigning premiums, should take place *before* throwing open the room for public exhibition.

It was thought *certain* that such a course would be best calculated to ensure unbiassed and impartial decisions, and, therefore, likely to give most satisfaction to competitors, and *most extend the usefulness of the Society.*

It was resolved that the next June meeting be held at Lyons, and that Wm. H. Adams be Chairman of the Committee of Arrangements for said meeting, the day and place of which to be seasonably advertised in the newspapers.

The proceedings of the Society having been stated, it only remains to pay a well deserved tribute to Mr. Blossom, not merely for the convenience of his arrangements to accommodate the Society, but also for the excellence of the dinner provided by him, and the elegance with which the table was set out. The dishes were numerous, including many of the premium vegetables and fruits, which gave forth their choicest relish, as if anxious to justify the Committees; and they, the meats, and all, were arranged—

"In order *so contrived* as not to *mix*
Tastes not *well joined*, inelegant, but bring
Taste *after* taste, *upheld* with *kindliest change*"—

as Eve spread her first horticultural table for the "affable Archangel;" and to grace and crown the whole, the superb boquets of flowers, proud both

of their prizes and of those in whose names they had been won, "with rich inlay," at suitable intervals, "reared their flourished heads" along the board, and "wrought mosaic." It was in truth a scene where the savor, flavor, and fragrance of the viands, wines, and flowers, were blended with a harmony not unlike that of a well-composed piece of music, varied and enlivened, in the execution, by a running accompaniment of *tongues*, which when pitched to the key-note of a true social feeling, and touched with sense and wit, constitute the most delightful wind-instruments ever played on beneath the sun.

Such was the Autumnal meeting of this Society on the 30th of Sept. 1835.—Attest,

Z. BARTON STOUT, Rec. Sec'y.

Spayed Cows.

The following is extracted from a communication in the Virginia Farmers' Register:

Since witing the above, the No. of the Register for July has been sent me from Norfolk, in which I observe a communication on the subject of spayed cows. I have often thought it strange the practice of spaying was not more common. About sixteen years ago, my father, Philip Tabb of this county, who was in the habit of spaying two or three heifers every year for beef, at the proper age, had the experiment made on a cow with her first calf, which succeeded; and he sent her to me at Norfolk, after keeping her a year or two, thinking she would be desirable for a town cow. She gave as much milk as ordinary cows, and I thought at first she would be a great acquisition, but soon found one inconvenience attending her which had not occurred to me. Having no calf to attach and accustom her to my lot, it was necessary to send after her whenever required, or keep her up altogether, which was inconvenient, and being (as most spayed animals generally are) in fine order, I lost her in a few months, and have no doubt she was sold to the butcher. I have always regretted the loss, not so much on account of the value, but that I might have ascertained how long, and in what quantity, she would have continued to give milk. I have now on this estate eighteen spayed heifers, (and I kill two or three every year for beef,) from one to seven years old. The operation is performed when they are about a year old, say in the month of May, and with the single precaution of keeping them entirely from food or water for twenty-four or thirty-six hours before—is not attended with the least risk—is performed in the same way and may be done by any person in the habit of spaying hogs. They go to their food immediately after, and require no attention. The operation has been imperfectly performed two or three times, and they had calves afterwards; but I have only lost one, and that in consequence of keeping it suspended a very long time, in order to teach, and indeed, to permit an inexperienced hand to operate. We select the most indifferent calves to spay, which is one way to improve the stock. You increase the size amazingly. They become as large as ordinary oxen—are easily kept—make the finest beef—and as they are not in perfection till six or seven years old, we work them after three or four, to make them gentle, and consider them superior for that purpose to the ox.

I have had so little experience in farming, and am necessarily so much absent in the performance of other duties, that I am loath to make any communication for publication, and certainly should not, but for my knowledge of the liberal and charitable feeling among farmers towards each other. One of the greatest objections to landed estate in Virginia, consists in the difficulty of procuring first rate managers. The difference between good and bad managers is, abundance and wealth in the one case, and want and poverty in the other. I have been very fortunate in that respect; and acknowledge myself under obligations to Mr. Anthony Smith, my manager. For industry, humanity, care and attention to the people and stock, he cannot be surpassed; and I take the liberty to suggest to every farmer who has a good manager, the propriety of selecting one or two boys of intelligence and good character, to place under him. Patriotism and self interest should prompt them to do so, as the best mode of increasing the number of good managers, and their chance of obtaining one, and of improving the country. It is impossible for the proprietor of a large estate to attend to the details; and perfectly useless for him to read, think and plan, unless he can procure an agent who can understand and execute. JOHN TABB.

From the Silk Culturist.

Examine your Farms.

Most farmers are shamefully, if not criminally, ignorant of the resources of their farms, and the facilities they have to acquire competency and the comforts and conveniences of life. Many have lived half a century on farms which have been cultivated by their fathers and grandfathers—have worn themselves out with labor and fatigue, in obtaining a miserable livelihood, a mere living "from hand to mouth," and now, in their old age, are talking about abandoning their farms as worthless, and going to Illinois, Michigan, or some other fairy land in the far-famed west, to spend the remnant of their lives in affluence and without labor. They have worn out themselves and their farms together, and discover no way of reinvigorating the one or reclaiming the other. They will tell you that they have tried to raise corn on the same piece of land for twenty years, and cannot get more than ten bushels to the acre, which will not pay them for the labor and expense of cultivation—that their grass lands have "run out," and they have no means to manure them—that their pastures have become overrun with bushes and briers, and they cannot destroy them—that their buildings are going to decay, and they are unable to repair them—and, in short, that they are compelled to spend most of their time in cutting down their young timber and carrying it to market to obtain broad-stuffs for their females. Ask them if they have thoroughly explored their farms with a view to ascertain their capabilities and resources, and they will tell you they have; but they have endeavored to follow the track of their ancestors, and been extremely careful not to step out of their steps, lest they should be ruined by innovations and experiments. Now what has been the result of their investigations and labors? Are they "well off," and in the enjoyment of good health and buoyant spirits, or are they "put to it," and suffering under the effects of broken-down constitutions—afflicted with the rheumatism, and tormented with the hypocondria? Such farmers must pardon us for asking them a few additional questions. Have you ever examined the "Frog Pond" on whose frozen surface you have spent so many winter evenings in skating, when a school boy, to see if it does not contain an inexhaustable quantity of decayed vegetables and alluvial deposits? Mud taken from ponds and other still waters is a valuable manure for dry, sandy, and gravelly soils. It has produced as good crops of corn as manure from the barn-yard or stable. It is also an excellent ingredient in a compost heap. Have you ever examined the "Little Brook," in whose rippling waters you used to angle with so much delight, to see if a portion of it cannot be diverted from its natural bed, and spread over that worn out grass land which does not now yield you half a ton of daisies to the acre? The grass crops of dry soils are astonishingly improved by irrigation, and every good farmer will avail himself of it as far as the situation of his farm will admit. Have you examined the "Quagmire Swamp," where, for thirty years, you have sunk down to your hips in mud and water, when engaged in polling out a kind of hay, the very sight of which makes your cattle bellow loud enough to frighten into fits all the women and children in the neighborhood, to see if it cannot be drained, and made to produce a good crop of English grass? Many swamps, whose native products are worthless for forage, or even manure, are easily reclaimed by draining, and made to produce large crops of clover and timothy. Have you ever examined the "Ledge," where the boys and girls used to hold their whortleberry parties, to see if it cannot be converted into as valuable a granite quarry as can be found in Quincy or Maine? Have you attempted to reclaim the "Old Side Hill," where your mother used to gather pennyroyal, and pick blackberries, by the application of plaster of Paris and a rotation of crops? Have you cleared up the "Bush Pasture," where you used to catch rabbits and partridges, and set it out with the Italian or Chinese mulberry? We might go on *ad infinitum* in putting these questions, but these ought to be sufficient to satisfy every farmer who gives them a negative answer that he is deplorably ignorant of the internal resources of his farm. We can point to multitudes of farms which would at this time be worth one hundred per cent. more had their owners been asleep during the last forty years; for in that event they would have been covered with valuable timber, instead of being exhausted by an incessant and changeless course of cropping. But the farmer has worn out himself in wearing out his farm, and what can be done? The answer is at the head of this article—EXAMINE YOUR FARMS!

Disbanding Silk from the Reel.

We have already spoken of the importance of good reeling; but in order to ensure a good article, care must be taken in disbanding the silk from the reel. The single fibers of which the thread is composed, are liable to different degrees of stretching as they are wound from the cocoons. This, however, depends much upon the assorting of the cocoons—if they are well assorted, the degree of extension will be less than if poorly or carelessly assorted. Care in assorting, however, will not wholly overcome the difficulty, because some are necessarily longer in the water than others, and therefore yield their silk more readily. The weak latter ends of some cocoons also wind off with the strong first part of others. The consequence of this is, the fibers are unequally stretched, and (if taken from the reel too suddenly) those that are most stretched will contract the most and make a thread less compact and firm.

To remedy this, let the skein remain on the reel six or eight hours, or until it is dry and the different fibers brought to a more uniform degree of extension. This also gives the fibers an opportunity to unite more firmly. After the skein is completely dry and ready to be taken from the reel, squeeze it together all round to loosen it upon the bars; and then with a thread, made of refuse silk, tie it in the places where it bore on the bars of the reel. It may then be slid off the reel, and ties should be made opposite to those first made. It should then be doubled, and tied near each extremity, and laid by for use or sale. When the skein is finished, a mark should be tied to the end of the thread, otherwise it may mix with the threads of the skein and render it difficult to find it.—*Ib.*

Specimens of Silk.

We have seen several specimens of raw silk raised the past season by Samuel Church, Esq. of Bethlem, in this State, of the most perfect and beautiful filiature. We have rarely seen foreign raw silk superior to them, and we were somewhat surprised to learn that they were the result of the first effort of Mrs. Church at reeling. Silk of this quality, and reeled in this manner, can be easily manufactured into fabrics of any description. These specimens are not only creditable to Mrs. Church, but they afford abundant proof of the fact that American ladies can reel as good silk as those of any other country. We are also much gratified to learn that the citizens of Litchfield county are about forming a Silk Society, on the plan adopted by those in several of the other counties. These Societies are almost indispensable to the success of the enterprise; and could the ladies of Litchfield county have an opportunity of seeing the specimens reeled by Mrs. Church, we have no doubt they would be perfectly satisfied of its practicability, and engage in it with spirit and success.—*Ib.*

☞A poor freedom is better than a rich slavery.

COMMUNICATIONS.

Sugar.

BY W. GAYLORD.

Mr. Tucker—I have seen in some late numbers of the Farmer, inquiries relative to the manufacture of sugar from beets and potatoes. The inquiry, as far as relates to beets, you have answered in your last number; and the process of manufacture where potatoes are used, has been already fully and ably described in the Farmer, in vol. 2d, at page 38, in an article prepared by a practical operator, Mr. Guthrie of Sackett's Harbor, for Professor Silliman's Journal. Mr. G. made large quantities of molasses from potatoes, but with all his skill was unable to chrystalize or grain it, without the introduction of some deleterious substance, lead for instance; and consequently all his was used in a liquid form, of the consistence of thick syrup, or rather honey. The potatoes were first converted into starch, and then by boiling in sulphuric acid, diluted, for some hours, into sugar. The directions in the Encyclopedia Americana for this process, are 2000 parts of starch, 8000 parts of water, and 40 parts strong sulphuric acid—the mixture to boil some thirty six hours in silver or lead; but Mr. Guthrie accomplishes the conversion by the use of steam in about six hours. The production of sugar or molasses is possible from a great variety of materials provided by nature, such as the cane, maple, beet, honey—all plants that afford starch, or substances that by chemical process can be converted into gum, as flax, linen rags, &c.; still none have yet been found, which can successfully enter into competition with the cane, where it is grown in favorable circumstances, and the production or use of sugar is unfettered with vexatious restrictions.

In your article on beet sugar, it is remarked that "chemistry has discovered a new material for sugar in wheat, the great staple of the west." That starch could be converted into sugar, has long been known; and it is only the starch in wheat, potatoes, or arrow root, that is thus convertible. Starch by some chemists, and particularly Prout, is considered as sugar partly organized; and though containing but a small quantity of carbon and hydrogen more than sugar, still this excess is sufficient to prevent its chrystalization, or conversion by nature into sugar. The following table prepared from the statements of Borzelius, Raspail and Dumas, by Dr. Prout, shows in a curious and interesting light, by what mere shades of difference in their constituent atoms, substances, which to the sense appear as far apart as the zenith from the nadir, are separated. Water is composed of definite and well ascertained proportions of oxygen and hydrogen, and in the formation of sugar, starch, acetic acid, and lignin, or the pure woody fiber of trees and plants, these two materials are found united in the same proportions as in water; the only ingredient added for their completion being carbon. These substances, sugar, acetic acid, starch, and lignin, may therefore be considered as composed of carbon and water in the proportions here given.

	Carbon.	*Water.*
Sugar.—100 parts of sugar from Starch contains,	36,20	63,80
From Honey,	36,36	63,64
From East India moist,	40,88	59,12
" Beet root and Maple,	42,10	57,90
" English refined,	42,05	58,05
" Sugar Candy pure,	42,85	57,15
Acetic Acid,	47,05	52,95
Starch.—Arrowroot in its ordinary state,	36,04	63,06
From Wheat in its ordinary state,	37,50	62,50
" Wheat dried 212°,	42,80	57,20
Lignin.—In its ordinary state of dryness,	42,70	57,30
From Willow dried at 212°,	49,80	50,20
" Box do. do.	50,00	50,00

Dr. Prout in his Bridgewater Treatise remarks, "that both starch and wood can, by different artificial processes, be converted into sugar or vinegar. But we are unable to reverse the process, and convert vinegar into sugar, or starch into wood." The chemist Braconnet, has ascertained that a pound of linen rags yields rather more than a pound of sugar. The finest chrystals of sugar I have ever seen, were from that of the maple. They were a quarter of an inch in length, and an eighth in breadth, flattened six sided prisms, terminated by similar sided summits. These chrystals were as clear as flint glass, very hard and brittle, and not easily soluble.

W. Gaylord.

Seed Corn.

BY VORUS.

As the season for harvesting corn is approaching, a few remarks with regard to the selection of ceed corn may not be improper.

It has been our practice when harvesting corn, to select the seed for the ensuing year, and this we do from a knowledge of the fact that it is the best time. In making the necessary selections, we take the seed from those stalks which have two or more large bright ears on them, and in practicing in this manner, we have invariably found the quantity and quality increased annually.

In discoursing with a neighbor of mine not long since, he said, that in his field of corn this season, there was not but one ear on a stalk; but in my field there was almost universally two or more on a stalk. I very easily accounted for this difference. He usually takes his seed corn from his bin of ordinary kinds, which must undoubtedly contain many very imperfect kernels.

A judicious selection of seed of almost any kind of herbaceous plants, is indispensably necessary to ensure a good crop, and to preserve the seed entire. I am aware that there is a defect with farmers on this subject, and it is therefore that I would drop a hint for their reflection; and could I prevail on any of the farmers of this vicinity to renounce their "old system," and act on the principle of reason and common sense, my wishes will be gratified.

Vorus.

Brutus, Oct. 1, 1835.

Broom Corn.

BY RHO.

Is not the cultivation of Broom Corn deserving of more attention than it receives from the farmers of Western New York? The value of Broom Crops, if rightly managed, is so considerable, and the demand for the product so great, not only in our own state but for exportation to Canada, that many of our enterprizing farmers would unquestionably profit largely by devoting a few acres to the cultivation. The information respecting the growth and profits of the crop, already published in the Genesee Farmer, is alone worth ten times the price of the paper to any one who wishes to embark in the business. The manufacture of brooms would usefully employ all hands during many of the stormy days and long evenings of winter; while the seed would materially help to increase the quantity of pork without drawing so largely as the growers would otherwise have to do from their corn-crib.

Rho.

From the New York Farmer.

The Wheat Fly.

The following communication contains information of great value to the growers of wheat. It is from a source on which the most implicit reliance may be placed; and our highly esteemed correspondent will please accept our thanks for making this work the medium of its publication. We shall take great pleasure in publishing further communications on the subject.

Most Important Agricultural Intelligence.

By Henry Colman.

The grain fly, or insect, which for a few years past has been so destructive to wheat in many parts of the country, has this year extended his ravages, and excited, wherever he has made his appearance, very serious alarm. An eminent farmer in the state of New York wrote to me a year since, that he must give up the cultivation of wheat, as his crops were so much injured that he hardly obtained a return equal to the seed sown. I knew another instance in the same state, where, though the straw was large and the appearance promising, yet from thirty bushels sown, not more than seven were obtained. I have known other cases in which the whole field has been mowed and sold for litter; and in a recent excursion up the valley of the Connecticut, I have heard complaints every where, and seen hundreds and hundreds of acres so destroyed that the grain they would yield would hardly pay for the reaping. Besides this, the same insect has destroyed many fields of rye in the same manner as the wheat, and been found this year in the oats; the progress of the insect has been about forty miles a year; and a distinguished gentleman in Vermont, a practical and extensive farmer, remarked that he feared they would on this account be obliged to relinquish the cultivation of small grain.

The habits of the insect have not yet been accurately observed. I myself have not yet seen the fly, but have seen the worms in the kernel after the grain has been destroyed. He is represented as being a small reddish fly, which is seen hovering over the wheat fields in immense numbers, while just in flower, and has been observed to alight upon the kernel or bud, to ascend it, and then descending in the inner side, to deposit his egg between the stalk and the kernel. I purposely avoid the use of all scientific terms, wishing to be understood by common farmers. From this egg the worm is generated, which entirely consumes the grain while in the milk, leaving nothing but the husk, in which are found several small yellow worms, about an eighth of an inch in length. As the work of destruction is now completed, any farther observation of his habits are of no importance, unless we can some way reach so as to destroy the germ of the future insect. No preparation of the seed or ground, however, has as yet been found effectual to this end.

The continuance of the fly upon the grain is thought not to exceed three or four days, and they are seen in greatest numbers just at night. Some farmers have found late sowing a partial security, as the season for the flies has passed away before the wheat was in condition for their attack. Spring wheat sown as late as the 20th and 28th of May, has in a great measure escaped, while some sown as late as the 7th and 8th of June has been untouched, though in cases of such very late sowing, the farmer will be very fortunate if,

in attempting to escape the fly, he does not get nipped by the frost.

I have now, however, the extraordinary happiness of announcing to the agricultural public, what there is reason to believe will prove an effectual, as it is a reasonable and feasible preventive. Should it prove effectual, the remedy will be worth millions and millions of dollars to the country. It was communicated to me on a late tour of agricultural inquiry and observation by Dr. Eliphalet Lyman, of Lancaster, N. H., an intelligent and practical farmer, whose crop of wheat usually averages from twenty-five to thirty bushels per acre. It consists in the application of fine slacked lime to the wheat just at the time of its heading out and flowering, at the rate of about a peck to the acre. It is sown broad cast upon the wheat while the dew is on, and the field is rendered white with it. The best mode of applying it is with the hand, and for the person who sows it, taking his proper breadth or cast, to walk backwards, so that he may not cover himself with the lime. It must be sown while the wheat is wet or the dew is on, and the philosophy of the application is very simple. The maggot of the fly is deposited between the grain and the stalk. It is, of course, an animal substance. The lime, or alkali, mixing with the dew, is carried down upon it, and neutralizes or destroys it. Dr. Lyman has now tried this preventative three successive years, and has invariably, as he assures me, saved his crops, while those of his neighbors have been destroyed.

I visited, at the same time, the field of a Mr. Bellows, in the same town, who had been advised by Dr. Lyman to make this application. The field consisted of several acres. He did it, and it has proved successful; and what is strongly confirmatory of the value of this remedy, is the fact, that a field of rye belonging to Mr. Bellows, adjoining his wheat, and I think within the same enclosure, which was not limed, has been nearly destroyed by the fly.

These are certainly very important experiments, and I make no delay in presenting them to the public. Dr. Lyman has promised me a more particular account of the experiment and result, and likewise Mr. Bellows, which, as soon as received, I shall be happy to communicate. I have received an indirect and indefinite communication, that the same experiment has been successfully made in Gilmanton, N. Y., but I have not yet been able to obtain either the name or the details.

HENRY COLMAN.

Meadowbanks, Sept. 15, 1835.

From the Cultivator.

Preserving Meats.

The intrinsic value of salted meats, whether for family use or for market, depends materially upon the manner in which they are preserved. An excess of salt renders lean meats, as beef and hams, hard, tough and unpalatable, besides destroying much of their nutritious properties; while too little salt, or an equivalent of some other anti-sceptic, will not preserve them in a healthful state. It is as easy and as cheap to preserve meats well, as it is to do it badly, if we are furnished with good rules, and duly observe them. There are no doubt many rules adapted to this end. We have tried many, and have finally, for some years, adopted, with perfect satisfaction, for family use, the pickle which we give below, for the curing of beef and hams. It is said to be equally good for pork, though we have not used it for this purpose, as we lay down none but the fat part of the hog, which is not injured by an excess of salt. This has been denominated the

Knickerbacker Pickle.—Take 6 galls. of water, 9 lbs. of salt, 3 lbs. coarse brown sugar, 1 quart of molasses, 3 ounces saltpeter, and 1 oz. pearlash—mix and boil the whole well, taking care to skim off all the impurities which rise to the surface. This constitutes the pickle. When the meat is cut it should be slightly rubbed with fine salt, and suffered to lay a day or two that the salt may extract the blood; it may then be packed tight in the cask, and the pickle, having become cold, may be turned upon and should cover the meat. A follower, to fit the inside of the cask, should then be laid on, and a weight put on it, in order to keep the meat at all times covered with pickle. The sugar may be omitted without material detriment. In the spring the pickle must be turned off, boiled with some additional salt and molasses, skimmed, and when cold returned to the cask.

For domestic use, beef and pork hams should not be salted the day the animals are killed, but kept until its fiber has become short and tender, as these changes do not take place after it has been acted upon by the salt.

Meat that is to be dried and smoked, requires less salt than that which is to remain in pickle, on account of the preserving qualities of the pyroligneous acid, which is supplied by the smoke of the wood. The great art in smoking meat well seems to consist in having the meat dried by smoke and not by heat. The hams of Westphalia, and the smoked beef of Hamburgh, which are unrivaled in reputation, are managed in this way. The Westphalian farmers have a closet in the garret, joining the chimney, made tight, to retain smoke, in which they hang their hams and bacon to dry, out of the effect of the heat of the fire. Two apertures are made from the closet into the chimney, and a place is made for an iron stopper to be thrust into the funnel of the chimney, to force the smoke through the lower hole into the closet. The upper hole must not be too big, because the closet must be always full of smoke, and that from wood fires.

The Hamburgh method of making their superior smoked beef is this: Fires of oak chips are built in the cellars, from whence the smoke is conveyed by two chimneys into the fourth story, and thrown into a chamber by two openings placed opposite to each other. The size of the chamber is proportioned to the quantity of meat to be smoked, but the ceiling is not raised more than five feet and a half from the floor. Above this chamber there is another made with boards, into which the smoke passes through a hole in the ceiling of the first, whence it escapes by openings formed in the sides. The pieces of meat are hung up at the distance of a foot and a half from each other, and a fire is kept up night and day for a month or six weeks, according to the size of the pieces.

From the Vergennes Palladium.

Folding Sheep and Raising Turneps.

Let the Sheep assist in raising their own Food.

MR. BLAISDELL—I perceive that occasionally a small portion of your paper is devoted to the subject of agriculture, and feeling anxious to promote so important a science, and having made some experiments rather out of the common practice of our farmers, I take the liberty to communicate them to you, with the results. Should you consider them worthy, you are at liberty to lay them before your readers. They are as follows:

Last spring I devoted about one hundred acres of land as pasturage for my sheep, and divided it into lots of 30 or 40 acres each; the adjoining lot was composed of a fine light loam, rather shallow, but well adapted to most crops, with manure and plaster. I went into the lot on the 20th day of June, and ploughed half an acre of the above described land; I put a fence around the same and folded 300 sheep in it five nights. On the first day of July I harrowed and sowed it with English turnep seed, of this summer's growth, and left the fence down; the sheep being accustomed to that spot, and preferring ploughed land to sleep on, they again yarded themselves there five nights, making in the whole 10 nights, during which time we had several showers. On examination I found the field trod as hard as a common road. I then expected the seed would not come up, but the weather proving favorable, the young plants soon appeared. Without loss of time I dusted the field with four bushels of ashes, and on the third day with half a bushel of plaster; when the plants were five or six inches high, I spent two days weeding and thinning them. On the first of September I began to pull for my own use and to carry to market. The only fault found with them was, they were too large. The crop will now show for itself, and is considered by all who has had an opportunity of viewing it, to be one of the finest they ever saw. They judge the crop will yield from 300 to 500 bushels, and I think myself it will exceed 200 bushels more than sufficient to pay the expense of harvesting.

Thus it may be seen that sheep may be made to contribute much towards raising their own food. I have sown several other small crops with equal success. And by managing as I have above described, I shall be enabled to manure my plough land, or the back part of my farm, and save the barn manure to be applied near home.

I will now compute the Debt and Credit.

Say the yard, Dr.

To two hands and team, ploughing and fencing,	$2 25
To seed,	0 25
To two hands and team half a day, harrowing and fencing,	1 12
To 4 bushels ashes and dusting,	0 60
To half bushel plaster and dusting,	0 35
To two days' work weeding and thinning plants,	2 00
	$6 57

Credit.

By 200 bushels at 25 cts. per bushel,	50 00
Balance,	$43 43

I will here remark, that the land will be in fine order for two years, without any other manure than a little plaster.

I have engaged a machine at the South for cutting potatoes, turneps, and other roots for sheep. On its arrival it will be free for the examination of any one who wishes to build. I will now close, with the earnest request that our farmers would communicate the result of their useful experiments—it would be beneficial to all. I wish my neighbors would follow Gen. Barnum's example, by freely communicating the information he acquires by experience and by agricultural publications. I believe it is but justice to say of him, that we are more indebted to him than any other man in this part of the country, for the introduction of fine domestic animals, his recommendation of the manner of breeding and crossing the breed of them, and for various other useful improvements in farming.

REUBEN WHEELER.

Ferrisburgh, Sept. 25, 1835.

From the Farmer's Register.

Remarkable Fecundity of a Ewe.

Mr. William Nottingham, sen., has at his farm near Eastville, (Northampton, Va.) a ewe which has brought 20 lambs in 7 years and 2 months, from the first to the last yeaning; and omitting the last, the first 19 lambs were produced in less than 6 years. The following dates and numbers were copied from the written memoranda kept by Mr. Nottingham, on whom, as a man of observation and accuracy, the most entire reliance may be placed.

The ewe was yeaned in February, 1827.

In February, 1828, she brought	2 lambs.
February, 1829,	4
November 1st, 1829,	3
(being 7 in 19 months.)	
February 7th, 1831,	3
March 10th, 1832,	3
January 18th, 1833,	2
December 31st, 1833,	2
April 13th, 1835,	1

None of these were supposed to be premature births, and as large a proportion of the lambs lived as could have been expected in ordinary flocks, from births as they usually occur. Great care was generally taken of the mother, but owing to particular occurrences, she was sometimes

greatly exposed. Her four lambs were yeaned at a birth when out in a severe snow storm, and all (I believe) died in consequence. The ewe was raised as a house lamb, and is of the common breed. She was the only ewe kept on this farm, and has always been fed abundantly. When giving milk, her udder was stated to be more like a cow's in size, than that of a sheep. But if her fecundity was caused altogether by high feeding, it would seem that the same effects may be continued in her race by like treatment. Some of the female lambs of this ewe were given to Mr. Nottingham's sons, and have been kept as breeders, with the like abundant supply of food. Of these, "one has had 4 lambs at one time, and 3 at another time—another had 4 lambs at her first and only yeaning—and a third has had 3 lambs at one yeaning." These latter facts were also furnished me in writing by Mr. Nottingham's son. I omitted asking what proportion of these were raised—and did not note down the proportion of those lost by the old ewe.

Mr. Nottingham's flock of sheep is kept on grazing land on the sea side, and the mother of this family has been the only ewe kept at his house. In addition to this peculiar situation, she ad the company every year except the last, of more than one male—as several ram lambs were brought home from the sea side pasture at shearing time, to be killed in the course of the year. Upon these facts, and his observations, Mr. N. has formed the opinion that the several lambs of each yeaning had different sires—and that the number of males in fact determined the number of lambs. Whether this strange opinion is well founded or not, Mr. N. is so sure of it, that he has latterly more than once before the yeaning stated correctly the number of lambs that would be produced. The last time there was only one male with her. E. R.

July 30th, 1835.

From the Cultivator.

Preserving Roots.

We find in Chaptal's "*Chemistry applied to Agriculture,*" an excellent chapter on the preservation of animal and vegetable substances. We extract the following from the preliminary remarks.

"The nature of all bodies which have ceased to live or vegetate, are changed, as soon as the physical or chemical laws by which they are governed cease to act; the elements of which they were composed then form new combinations, and consequently new substances.

"While an animal lives, or a plant vegetates, the laws of chemical affinity are continually modified in its organs by the laws of vitality; but when the animal or plant ceases to live, it becomes entirely subject to the laws of chemical affinity, by which alone its decomposition is effected.

"The principles of the atmospheric air which is imbibed by the organs of living bodies, whether animal or vegetable, are decomposed and assimilated by them, while dead bodies are decomposed by its action. Heat is the most powerful stimulant of the vital functions, yet it becomes, after death, one of the most active agents in the work of destruction. Our efforts, then, for the preservation of bodies, ought to be directed to counteracting or governing those chemical or physical agents, from the action of which they suffer; and we shall see that all the methods which have been successful, are those which have been formed upon this principle.

"The chemical agents, which exert the most powerful influence over the products of the earth, are air, water and heat; the action of these, however, is not equally powerful over all classes of plants; the soft and watery, and those which approach the nearest to animal matter, decompose most readily; the principles of such are less coherent, less strongly united than that of others; so that the action of disorganizing agents upon them is prompt and effectual.

"All the methods now employed for the preservation of bodies, consist in so far changing their nature, as to deprive them of the elements of destruction contained within their own organs; or in secluding the substances to be preserved from contact with the destructive agents mentioned in the preceding paragraph; or in causing them to imbibe certain other substances, the anti-putrescent qualities of which counteract all action, whether of internal or external agents.

"In all vegetable products, water exists in two different states, one part of it being found free, and the other in a state of true combination: the first portion, not being confined except by the covering of the vegetable, evaporates at the temperature of the atmosphere; the second is set free only at a temperature sufficiently high to decompose the substances containing it: the first, though foreign to the composition of the vegetable, enters into every part of it, dissolving some of its principles, serving as a vehicle for air and heat, and being converted by cold into ice; by these several properties it greatly facilitates decomposition: the second portion, from which no evil of the kind arises, is found combined and solidified in the plants, and its action is thus neutralized."

Drying fruit, then, in order to preserve them, consists in depriving them of the water contained in them in a free state. This may be done by subjecting them to heat not exceeding 95 to 113° —either by exposing them to the sun, or in a stove room, or in ovens, which latter practice is resorted to, even in the warmest countries, at the commencement of the drying process. *In preserving the apple*, for instance, our author adds, that by depriving their surface of all moisture before putting them up; keeping them in dry places, where the temperature will be constantly between 50 and 54°, and by separating the fruits that they shall not come in contact, they may sometimes be preserved 18 months. The farmer in Schoharie, who has been in the habit of bringing the Spitzenbergh to our market on the 4th of July, owes his success to the observance of these rules.

On the preservation of the fruits of the earth by secluding them from the action of air, water and heat, M. Chaptal enumerates the following leading causes of decay.

"The atmospheric air, coming in contact with fruits, deprives them of their carbon, and forms carbonic acid.

"Fruits exposed to the solvent action of water suffer decomposition, by having the affinity existing between their constituent principles weakened, and at length destroyed.

"Heat dilates the particles of bodies, and thus diminishes the force of cohesion and attraction, and favors the admission of air and water.

"The combined action of these three agents produces very speedy decomposition; the effect produced by any one of them is slower, and the results different. So that in order to preserve fruits from decomposition, it is necessary to guard them from the power of these three destroyers."

Practically applied, these axioms teach, that to preserve roots in good condition, the following precautions should be observed:

1. That their surface be entirely freed from moisture before they are housed or buried, and that they be deposited in a dry situation, where water will not have access to them.

2. That they be excluded from the air, by burying them in dry earth, or slightly covering them in the cellar with earth. And

3. That they be kept in a cool temperature—the best ranging from 34 to 45 deg.

We frequently hear housekeepers complain, that their potatoes, turneps, and other vegetables, soon deteriorate, and lose their fine flavor, after they have been a short time in their cellars. This is a natural consequence of the injudicious way in which they are too frequently kept—exposed to the atmosphere, and to a high temperature, in a cellar adjoining the kitchen, or perhaps in the kitchen itself. Again, potatoes or turneps buried in a wet condition, or the latter with parts of their tops left on, are very liable to ferment and spoil. We find it to be a necessary precaution in burying turneps, to make one or more holes in the crown of the pit, to let off the rarified air, and abate the heat which is almost invariably generated on their being buried.

In preventing the total loss of potatoes that have been affected by frost, Thomas Dallas directs, that when they are slightly touched by the frost, it is only necessary to sprinkle the roots with lime to absorb the water under the skin; that when the outer portion of their substance is frozen, the tubers may be paired and thrown for some hours into water slightly salted; and that when they are wholly frozen, they will yield, upon distillation, a spirituous liquor resembling the best rum, and in greater quantities than roots which have not been frozen.

The quotations we have made above are invaluable to the farmer and house keeper; and if the principles which they establish are understood and practiced upon, we shall have no cause to regret the length to which we have extended this article.

From the Farmer's Register.

Gypsum not Injured as Manure

BY BEING HEATED.

Impressed with justness of a remark of yours, that "information obtained from statements in detail of agricultural experiments, is far more satisfactory to the attentive and laborious inquirer, than a mere report of the general opinions of the experimenter," and in accordance with that spirit, I now offer you a brief account of an experiment, which perhaps may not be uninteresting.

In the spring of 1834, intending to plaster a lot of orchard grass, I ordered a few barrels of gypsum from Charleston. As I had before found the process of pulverizing the stone rather troublesome, I requested my factor to purchase the gypsum already ground into powder. When the gypsum arrived, I was astonished at the high price it had cost me, to wit, six dollars per barrel; but not suspecting the judgment of my factor as to the quality of the article, I made no examination of it myself, but placed it entirely on the account of imposition. In June I had it spread over the grass at the rate of one bushel per acre. The very next day after having spread it, a plasterer, who, it seems, had already examined the plaster, called on me to ask the favor, as the article was not to be had in the Columbia market, of a barrel of it, to finish a job of stucco-work in which he was then engaged. I told him there was still a barrel on hand which he might have, but that it was raw gypsum, and that he would have to put it through the process called "boiling," before he could use it. He replied, that it had already gone through that process, and was excellent plaster for his work. I denied the fact, as I had bought it for simply ground gypsum. He, however, instantly undeceived me, and convinced me, by working a little of it into plaster, that he was right; upon which he took the barrel, with which he finished his job of stucco-work.

As I had never seen any account of the application of gypsum in aid of vegetation that had undergone the process of heating, it at once occurred to me that I had probably destroyed my lot of grass. Reflecting a moment, however, upon the effect of heat upon gypsum, it was obvious that it had undergone no essential change in its component principles, except the expulsion of the water of composition. It was still the sulphate of lime in a more concentrated and condensed state; and as in this state its avidity for water is so prodigiously great, I concluded the first rain, or perhaps the dews, would soon saturate it, and re-convert it into its natural state of gypsum; and, therefore, I could not conceive how it could injure the grass, unless from an over-dose of gypsum in consequence of its greater strength to the bushel, of which I felt but little apprehension. In a few days afterwards, upon receiving one of the numbers of your Register, I was gratified to find you had opened a discussion upon the same subject, the first which I had ever seen; and so far, in the absence of any experiment, the same conclusion had been arrived at by yourself.

My accidental experiment, however, I think, goes far towards settling the question. The grass never showed any signs of unhealthiness, or suf-

fered in any way for a moment; but on the contrary, from the manner it sustained one of the severest drouths ever witnessed in August, and again the unparalleled cold of the last winter, and the manner in which it has subsequently flourished and retained its verdure, I am satisfied the mistake was all in favor of the grass. I had applied gypsum to a part of the same lot in June of the year preceding. The benefits were very manifest, but not equal to those from the last plastering. In 1832, I applied it at the rate of about one bushel per acre of unheated gypsum, and it was my intention to apply only one bushel per acre in 1834; but by the mistake, as gypsum contains 22 per cent. of water, which had been driven off, I of course applied what was equal to one bushel and nearly a quarter of the unheated article; which the result has shown was not too much.

The great objection then to the application of gypsum that has undergone the process of heating, as a fertilizing substance, consists in the expense, and not in any deleterious or impaired qualities of it—which expense at the rate I paid, was far too great. The heated plaster cost me about two dollars per bushel, while I never paid higher than ten dollars per ton in Charleston for the gypsum in stone, and have bought it as low as seven dollars. J. D.

P. S. As it is satisfactory, and generally useful to know all the circumstances attending an experiment, I will mention that the lot on which my grass grows is new land, on a ridge of pretty good soil, with a growth of oak and hickory, in Fairfield District. It is what we call clay soil, mixed with a good deal of fieldspar stones; but sufficiently silicious to be easy of cultivation. It is shaded by the natural growth of lofty oaks, &c. left standing about, 50 and 60 feet apart. It has had no manure except two annual supplies of cotton seed, separated at the rate of two wagon loads (45 bushels each) to the acre. The grass is flourishing and profitable. J. D.

He who puts himself to *trouble* to *pry* into his neighbor's business, gains nothing but scorn, while he exposes an *impertinent curiosity and vicious heart.*

NOTICE—Redemption of Lands sold for Taxes—State of New York, Comptroller's Office—Notice is hereby given, pursuant to section 76, title 3 of chapter 13 of the first part revised statutes, that unless the lands sold for taxes at the general tax sale held at the Capitol in the city of Albany, in the months of March and April, 1834, shall be redeemed by the payment into the treasury of the state, on or before the 21st April next, after the date hereof, of the amount for which each parcel of the said lands was sold, and the interest thereon at the rate of ten per centum per annum from the date of the sale, to the date of the payment, the lands so sold and remaining unredeemed, will be conveyed to the purchasers thereof. Dated October 2, 1835.

oct 6-6w A. C. FLAGG, Comptroller.

Monroe Horticultural Garden & NURSERY.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Mo*nroe co. N. Y. Sept. 13, 1834.

List of Payments

For the Farmer from Aug. 28, to Oct. 1, 1835.

For Fifth Volume.

James P. Robinson.	Hugh Stewart.
Enos T. Throop.	John A. Crawford.
Allen A. Hall.	Joseph Blodget.
Benj. Litton.	A. G. Ransom.
Joseph Stanton.	Z. Barton Stout.
Daniel Le Barron.	H. P. Sartwell.
J. W. Bacon.	Eldrich Smith.
Benj. Gould.	Stephen Thorne.
Francis Root, 2d.	Henry Post.

For vols. 4 and 5.

Uri Webster.	Lucian Rowe.
Moses Fairchild.	Alson Leavenworth.
George Post.	D. C. Norton.
D. A. Comstock.	Selah Hout.
A. Bannister.	Jas. Templeton.

From July 1, 1835, to July 1, 1836.

Stephen Lusk.	Thomas Allen.
Horace Dibble.	Lewis Allen.
David Shullers.	Lewis Dunning.
Edward Bradley.	Alex. M'Pherson.
Hun Beach.	Orsamus Willson.
Jonathan Adams.	Orson Child.
Harvey Pringle.	Frederick Topey.
Martin Hayward.	Asahel Cowles.
David Prince.	Hiram Robbins.

Jonathan Smith.

Last half vol. 5.

H. Wheeler.	Orlando Town.
Huram Finch.	L. H. Cutter.
Lorenzo Little.	Daniel Needham.
Luke M. Pratt.	Romanta Hart.
Consider Warner.	Benj. P. Adams.
Henry Charter.	James Wisner.
Caleb S. Thompson.	Calvin Ford.
Charles Griffing.	Lorenzo Page.

H. Roland, to July 1, 1835.
Ogden Creighton, to Jan. 1, 1836.
E. G. Faile, to Jan. 1, 1837.
Theodore Sprague, to Sept. 1, 1836.
Ephraim Chapin, last half of vol. 4.
Malcom Little, do.
John Mewburn, first half vol. 5.
Charles Sentell, for vol. 6.
Sanford Gifford, to July 1, 1836.
C. B. Hotchkiss, to Jan. 1, 1837.

THE IMPORTED BULL,

ROVER,

Of the Improved Durham Short Horns.

(COWS AT FIVE DOLLARS EACH.)

ROVER is a beautiful roan color, calved in 1833. Got by Rockingham, Dam (Cherry) by Wonderful—Gr. Dam by Alfred—Gr. Gr. Dam by a son of Mr. Chilton's Red Bull.

Wonderful was by Young Lawn Sleeves; Dam by Phenomenon. Wonderful's Dam was by Claxton—Gr. Dam by own brother to Old Wynyard, out of Princess by Favorite.

Young Lawn Sleeves was by Old Lawn Sleeves, the property of Geo. Barker, Esq.

Claxton was by Wynyard, the property of Sir Henry Vane Tempest.

Rockingham was by Fairfax, Dam (Maria) by Young Albion—Gr. Dam (Lady Sarah) by Pilot—Gr. Gr. Dam by Agamemnon.

THOMAS WEDDLE.

The old Norton Farm, East Bloomfield, five miles west of Canandaigua, October 6th, 1835. oct 10

Mulberry Seed.

JUST received at the Rochester Seed Store, a quantity of new *White Italian Mulberry Seed*, gathered within the last three weeks.

As this is a good season of the year for sowing the seed, persons desirous of commencing the silk business, or increasing their present stock, will do well to obtain some of this seed, which we know is perfectly new. REYNOLDS & BATEHAM.

Rochester, July 25, 1835.

Fisher on the Vine.

OBSERVATIONS on the Culture of the European Vine, to which is added a Manual of the Swiss Vignerons and the art of Wine making, translated from the French—Price 75 cents. For sale by

june 20 HOYT & PORTER.

Plum and Peach Stones Wanted,

FOR which a liberal price will be paid at the Rochester Seed Store.

sep 5-a6tf4t REYNOLDS & BATEHAM.

50,000 White Italian Mulberry TREES,

FOR Sale at the following prices: From 5 to 7 feet high, $25 per 1000, or $3 per 100; from 3 to 5 feet high, $16 per 1000, or $2 per 100. *The price per* 100 *will be charged in all cases when less than* 1000 *are taken.*

Persons wishing to engage in the pleasant and profitable business of raising Silk, have now a good opportunity for supplying themselves with Mulberry Trees, without the tedious delay of raising them from seed.

The Trees are from 3 to 4 years old, and from 3 to 7 feet high, with numerous lateral branches.

They will be fit to take up by the 10th of October, in time to transport them almost any distance before the closing of navigation.

All orders by mail will be promptly attended to, and the trees delivered either at the Erie Canal or Lake Ontario boats, according to order.

REYNOLDS & BATEHAM.

Rochester, Sept. 25, 1835. arftf

Ho, ye Farmers, that are in Debt.

THE following dialogue was supposed to have occurred in New York, between a Dutchman and a Frenchman, Madder growers in their respective countries.

Meinhere. De tam Yanke dey shpoil our matter drade.

Monsieur. What's that you say, sir?

Mein. Dat leetle tam Yanke lives in Pridgewater, he puts von, two, tree leetle root in de cround, and he digs up von, two, tree pushel, and he shpoil all our drade shure as tuyvels.

Mons. Fe gar.

Mein. Now I tells you vats we must to, we must shtop senting tirt to dat gountry, we must not sent to dat gountry more as von peck of tirt to von pushel of matter, and we must not tri and crind it pefore wa wash it, we must not bick out our pest roots to sent to England, put we must wash them altogeder, tri dem, crind dem coarse, den fan dem, den tri dem agin, den crind dem fine, zo as de news-baper zays de tam Yanke does.

Mons. What will England do then, she cannot raise madder for herself, and she cannot send any more of her Turkey reds to the American market, without we select our brightest root for her

Mein. Den I say, tam her, let her co widout. We can zell all our matter in America dese ten years, if we tont cheat dem beople any longer. Put I tell you some ting, Monsieur, dat vill make your eyes bop out of your head, if you pelieves it.

Mons. What is that?

Mein. Dat leetle tam Yanke dat lives in Pridgewater zays, dat he's coin to Ohio next shring, and he's coin to blant de whole sdate, exzept zome part of Michigan, with matter roots, and he's coin to enclose it wid de mulperry hedch to make de zilk vorms eat de leaves.

Mons. Thunder and lightning, they will ruin our silk trade with them.

Mein. Den de news-baper zays he's invited de beople to gom and zee him tig and wash and tri and crind matter every Monday and Zaturday afternoon, and he vill szhow dem all apout it, and when he's cot dem all larned he's coin to trive dem to Ohio and Illinois to tig matter on de brairie. Oh, de tuyvels, de merchan's of our gountry vill puy of dem pecause dey vill zell cheaber as we.

Mons. But, Meinhere, you fear those Yankees will be able to undersell you in your own country, when they cannot raise seed roots in ten years to plant enough to supply their own country dyers.

Mein. Never you minds dat, dem tam Yankees vill make roots wid deir shack-knives if dey cant tig dem.

Mons. But where is your Yankee, that lives in Bridgewater, to get his money to buy all his madder roots to plant the whole state of Ohio, as this newspaper tells us; it takes 8 bushels to plant an acre, and they ask $3,00. $3,50, and $4.00 a bushel.

Mein. Vy, he zays he's cot 800 pushel, and he's invited the shtizens of —— to choin him, and he vill carantee dem 12 1-2 ber zent. ber annum vor their money, or he vill dry to do better as dat by dem, and I pelieves he can; he tells dem he can clear von hunder ber zent once in 4 years, and I pelieves he can do dat. Oh, de tuyvel, he vill shboil our drade; he's now tigging his matter and when he gits trough, he's coin to brint what he's found out and zend it to all his gustomers. Sept. 1835.—oc 3-3t

Natural History.

THE WASP.

The manners of wasps are truly curious; but we are not about to enter upon a particular description of them. It is one quality only that we would at present mention—the power of the wasp to make *paper*. The substance of which the wasp's nest is made is actually paper; and the wasp's knew how to make paper long before man did. And it is particularly worth notice, that at this very time, a new method of making paper is said to have been discovered—namely, to make the paste (or pulp) for the paper with the fibres of rotten wood. A French gentleman M. Brad, says, he was determined to try whether he could not devote to some useful purpose a substance which seemed so useless. He took a large quantity of rotten wood, and removed the knots and parts from it. This was then put into an oil-mill, and ground; it was watered, and afterwards put into sacks to drain off. The paste thus formed was taken to a paper manufactory, and after going through the usual process, about 500 sheets of greyish paper were produced, fit to be written on, although no glue had been applied to it. By pasting a number of sheets together he formed a pasteboard sufficiently solid and light for ordinary uses. The wasp is a paper maker, and a most perfect and intelligent one. Whilst mankind were arriving by slow degrees at the art of forming this valuable substance, the wasp was making it before their eyes, by very much the same process as that by which human hands now manufacture it with the best aid of chemistry and machinery. While some nations carved their records on wood, and stone, and brass, and leaden tablets, other more advanced wrote with a pointed instrument on wax; others employed the inner bark of trees; and others the skins of animals rudely prepared—the wasp was manufacturing a firm and durable paper. Even when the papyrus—the flag growing on the banks of the river Nile in Egypt—was by a process of art made to serve for paper, the wasp was a better artisan than the Egyptians; for the early attempts at paper-making were so rude that the substance produced was almost useless, having no firmness of texture. The paper of the papyrus was formed of the leaves of the plant, dried, pressed, and polished. The wasp alone knew how to reduce vegetable fibres to a pulp, and then unite them by a size of glue, spreading the substance out into a smooth and delicate leaf. This is exactly the process of paper-making. It would seem that the wasp knows, as the modern paper-makers know, that the fibres of rags are not the only materials used in the formation of paper. She employs other vegetable matters, converting them into a proper consistency by her laborious exertions. In some respects she is more skilful even than our paper-makers; for she takes care to keep fibres of a sufficient length by which she renders her paper as strong as she requires. Many manufacturers of the present day cut their material into small bits, and thus produce a rotten article. One great distinction between good and bad paper is its toughness; and this difference is produced by the fibre being long, and therefore tough, or short, and easily pulled to pieces.

THE BURYING BEETLE.

A foreign naturalist gives a very interesting account of the industry of this insect. He had often remarked that dead moles, when laid upon the ground, especially if upon loose earth, were almost sure to disappear in the course of two or three days, often of twelve hours. To ascertain the cause, he placed a mole upon one of the beds in his garden. It had vanished by the third morning; and on digging where it had been laid, he found it buried to the depth of three inches, and under it four beetles, which seemed to have been the agents in this singular inhumation. Not perceiving any thing particular in the mole, he buried it again; and on examining it at the end of six days, he found it swarming with maggots, apparently the issue of the beetles, which M. Gleditseh now naturally concluded had buried the carcass for the food of their future young. To determine these points more clearly, he put four of these insects into a glass vessel, half filled with earth and properly secured, and, upon the surface of the earth, two frogs. In less than twelve hours one of the frogs was interred by two of the beetles; the other two ran about the whole day as if busied in measuring the dimensions of the remaining corpse, which on the third day was also found buried. He then introduced a dead linnet. A pair of the beetles were soon engaged upon the bird. They began their operations by pushing out the earth from under the body, so as to form a cavity for its reception; and it was curious to see the efforts which the beetles made, by dragging at the feathers of the bird from below, to pull it into its grave. The male, having driven the female away, continued the work alone for five hours. He lifted up the bird, changed its place, turned it and arranged it in the grave, and from time to time came out of the hole, mounted upon it, and trod it under foot, and then retired below, and pulled it down. At length, apparently wearied with uninterrupted labor, it came forth and leaned its head upon the earth beside the bird, without the smallest motion, as if to rest itself, for a full hour, when it again crept under the earth. The next day, in the morning, the bird was an inch and a half under ground, and the trench remained open the whole day, the corpse seeming as if laid out upon a bier, surrounded with a rampart of mould. In the evening, it had sunk half an inch lower, and in another day the work was completed, and the bird covered. M. Gleditsch continued to add other small dead animals, which were all sooner or later buried; and the result of his experiment was, that in fifty days four beetles had interred, in the very small space of earth allotted to them, twelve carcasses; viz. four frogs, three small birds, two fishes, one mole, and two grass-hoppers, besides the entrails of a fish, and two morsels of the lungs of an ox. In another experiment, a single beetle buried a mole forty times its own bulk and weight in two days.

Chapter of Facts.

MEASURES OF LENGTH.

Measures in length are the distance of one object from another, in some agreed standard.

A line is the tenth of a digit and the 100th of a foot.

A geometrical pace is 4.4 feet English; and an English mile contains 1200, or 1760 yards, or 5280 feet.

A Scotch mile contains 1500 paces; a German mile 4000; a Swedish and Danish mile 5000; the Russian mile 750 paces.

A hand, used in measuring the height of horses, is 4 inches.

A degree of latitude at the equator, is 69 1-7th English miles.

A surveyor's chain is 4 poles, or 66 feet, divided into 100 links of 7-92 inches. A square chain is 16 poles, and 10 square chains are an acre. 640 acres are a square mile; and 4840 square yards are an acre, 169.58 yards, each way.

The Irish acre 7840 square yards.

The Scotch acre 1.27 English.

A French arpent 5-8ths of an English acre.

121 Irish acres are equal to 196 English.

48 Scotch acres are equal to 61 English.

11 Irish miles are equal to 14 English.

80 Scotch miles are equal to 91 English.

A sea league is 3.4536 miles, or the 20th of a degree.

6078 feet are a sea mile.

A degree at the Equator is 365,101 feet, or 69.148 miles, or 69 1-7th nearly. In latitude 66.20 Maupertius measured a degree of latitude, in 1737, and made it 69.403; and Swauburgh in 1803, made it 69-292. At the equator in 1744, four astronomers made it 68.732; and Lambton, in lat. 12, 68.743. Mudge, in England, makes it 69.148. Cassina, in France, in 1718 and 1740, made it 69.12, and Biot, 68.769: while a recent measure in Spain, makes it but 68.63, less than at the equator; and contradicts all the others, proving the earth to be a prolate spheroid, which was the opinion of Cassini, Bernouilli, Euler, and others, while it has more generally been regarded as an oblate spheriod.

Degrees of longitude are to each other in length, as the cosines of their latitudes. For every 10°

Equator	69.2	50°	44.48
10°	68.15	55	39.69
20	65.27	60	24.6
30	59 93	70	23.67
40	53.1	80	12.02

The pendulum which vibrates seconds, 39.1393 inches at London, is the standard for the British measures. One mile is equal to 1618.833 such pendulums.

"I owe my success in business chiefly to you," said a stationer to a paper-maker, as they were settling a large account; "but let me ask how a man of your caution came to give credit freely to a beginner with my slender means?" "Because," replied the paper-maker, "at whatever hour in the morning I passed to my business I always observed you without your coat at yours."

There is a world of wisdom in this little anecdote; more good sense and more judicious admonition than are to be found in all the declamation of all the "ten-hour" orators that ever made a speech, or drew up a resolution. Practical mechanics will never grow rich by standing out for limits to working hours, or by any other mode or form of striking for wages.

Few parents realize how much their children may be taught at home by devoting a few minutes to their instruction every day. Let a parent make the experiment with his son of ten years old for a single week, and only during the hours which are spent in school. Let him make a companion of his child—converse with him familiarly—put to him questions—answer inquiries—communicate facts, the result of his reading or observation,—awaken his curiosity,—explain difficulties,—the meaning of things and the reason of things—and all this in an easy, playful manner, without seeming to impose a task, and he will himself be astonished at the progress which will be made.—*President Linsley.*

Journal of a Visit

TO the principal Vineyards of Spain and France, giving a minute account of the different methods pursued in the cultivation of the Vine and the manufacture of Wine—by James Busby, Esq.—Price 50 cents. For sale by HOYT & PORTER.

A Valuable Farm for Sale.

ON the Ridge Road, south side, three miles west of Sandy Creek, and within two miles of the Erie canal, in the town of Murray, Orleans county, containing 248 acres, upwards of 130 highly cultivated—buildings large and convenient. This is desirable property, being situated on the best road in this state,—the soil varied, and every variety of the very richest quality. The situation, too, is delightful. Price moderate—terms easy. Inquire on the premises of W. B. ILES.

july 11-frtf aug 29

Election Notice.

SHERIF'S OFFICE, Monroe co., Rochester, August 12, 1835.

A GENERAL ELECTION is to be held in the county of Monroe on the second, third and fourth days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed.

ELIAS POND, Sherif.

STATE OF NEW YORK, Secretary's Office. Albany, August 1, 1835.

Sir—I hereby give you notice, that at the next general election in this state, to be held on the 2d, 3d and 4th days of November next, a Senator is to be chosen in the eighth senate district, in the place of Chauncey J. Fox, whose term of service will expire on the last day of December next.

Notice is also given, that at the said election the following proposed amendments to the constitution of this state will be submitted to the people viz:

For restoring the duties on goods sold at auction, and the duties on salt to the general fund.

JOHN A. DIX, Secretary of State.

To the Sherif of the county of Monroe.

N. B. The Inspectors of Election in the several towns in your county wilgive notice of the election of Members of Assembly and for filling any vacancies in county offices which, may exist. aug 15